

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)	
)	
IP-Enabled Services)	WC Docket No. 04-36
)	

COMMENTS OF NEXVORTEX, INC.

Summary of Comments

nexVortex believes that the FCC should consider minimal regulations on IP-enabled services that utilize the public internet for origination of services. To that extent, it recommends that the FCC implement IP/VoIP equal access obligations on broadband providers in order to prevent broadband providers from blocking competitive providers services, like nexVortex. nexVortex also urges the FCC to avoid imposing 911 obligations on providers who do not utilize a NANPA-issued telephone number and are not offering a “first or second line” telephony solution to end users. To the extent that the FCC decides to impose regulations on IP-enabled providers, it should look at the functional differences between IP services that rely on NANPA numbering and those that do not. nexVortex also opposes the FCC imposing USF or access charge obligations on companies like itself who terminate calls to providers that already have USF and access charge obligations. Finally, nexVortex supports the FCC exercising exclusive federal jurisdiction over IP-enabled services such as services that nexVortex offers as it’s impossible for nexVortex to determine the jurisdiction of any SIP-based (public internet) originated call that it handles.

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nexVortex, Inc. hereby submits these comments to the Commission in response to its Notice of Proposed Rulemaking released on March 10, 2004 (“NPRM”)¹. The NPRM requests comments and input from interested parties regarding the future regulatory treatment of IP-enabled services.

I. INTRODUCTION

nexVortex is an impacted company as defined by the FCC’s NPRM and as such is very concerned about the financial and technical impact that the FCC’s rules could have on nexVortex and the potential for stifling its ability to continue as an entrepreneurial concern. nexVortex, Inc. is a Herndon, Virginia-based privately funded start-up developing VoIP services for consumer and business users. nexVortex is currently in limited trials, and expects to launch commercial service later this year. The first-service that nexVortex is introducing is a call routing and termination service that allows residential and SOHO users to originate calls from ip endpoints and terminate them to the PSTN via a terminating gateway that is not owned or controlled by nexVortex. To

¹ See Notice of Proposed Rulemaking, In the Matter of IP-Enabled Services, WC Docket No. 04-036, Adopted February 12, 2004, Released March 10, 2004 (NPRM).

establish a typical call session, nexVortex users will originate calls using a SIP client (softphone or hardphone) preconfigured for the nexVortex service. The call signaling information passes from the client to the nexVortex proxy which validates the user, and processes the call request. The proxy will establish a session between the client and the terminating provider, who in turn converts the IP call into TDM and delivers it to the PSTN. The ip media stream is transported across the public internet. In the current nexVortex model, the terminating provider is responsible for paying the LEC access charges, and in turn, nexVortex is billed those charges and are included in the rates that nexVortex will ultimately charge its users.²

II. THE COMMISSION SHOULD CATEGORIZE IP-ENABLED SERVICES IN CERTAIN CATEGORIES AS EXEMPT FROM ANY FCC OR STATE REGULATION

For comparative purposes, nexVortex can currently be viewed as an IP-based long distance carrier. It utilizes a software client which operates on the user's PC and requires the use of an existing broadband connection to the internet. nexVortex does not provide the broadband connection or the software client. This is similar to the current local/long distance arrangement in the PSTN environment. Traditional long distance carriers do not provide local dial tone or the phone and rely on the incumbent local exchange carriers to carry the long distance call from the end-user's phone to the long distance carrier's network. In the same way, nexVortex relies on the underlying broadband provider to carry the SIP-originated call to its server via the public internet before routing it to a terminating gateway provider.

² Currently, nexVortex is absorbing the costs billed to it by the terminating gateway provider and is not charging its end users during the trial period.

When nexVortex was formed nearly 15 months ago, it relied on the FCC's Stevens' report that the service it was going to provide was clearly not a telecommunications service and would not be regulated as such.³ In contemplating a change to the guiding principals conveyed in the Stevens Report the FCC should recognize that doing so will likely impact nexVortex, and many other companies operating in the VoIP market and in a manner consistent with the Stevens report.

However, there appears to be movement towards applying a minimal regulation to IP-enabled services and also consider imposing social obligations (911, USF, for example) to certain IP-enabled services. In that light, nexVortex proposes that IP-enabled services which could effectively be a substitute for local PSTN services be broken in to a different regulatory class apart from non-local (or for simplification – IP-LD providers). While both providers rely on a broadband connection, and the underlying broadband provider may, or may not be providing the IP-dial tone service, certain IP-enabled services do function more as a substitute for first line PSTN telephone services and allow users to both make and receive calls to a North American numbering plan telephone number (obtained from NANPA). Companies like nexVortex do not obtain numbers (currently) from NANPA and can only originate calls, not receive calls from the PSTN at this time.

³ Federal –State Joint Board on Universal Service, CC Docket NO. 96-45, Report to Congress, 13 FCC Rcd 11501 (1998) (Stevens Report). In particular, of the 4 definitions provided as guidance to determine if the service provided would be exempt from regulations, guideline 4, which states that “it transmits customer information without net change in form or content.” was what the company relied on for a determination of non-regulation. nexVortex solely uses the internet to originate a “call” from an end-user, and it utilizes a software client and underlying SIP software to originate and route the call to a gateway provider. Further, nexVortex does require the use of a non-standard CPE (i.e. standard phone) to originate the call – i.e., the computer and the softphone which further defined the service as not “bearing the characteristics of ‘telecommunications services’ in the Stevens Report.

nexVortex believes strongly that the FCC should NOT apply any regulation to IP-enabled services data, voice or video that originates over broadband (wireline or wireless) facilities and use the public internet for transportation of the IP-services. However, to the extent that an IP-enabled service uses the NANPA-controlled numbers, those providers should be classified differently (again, think local versus long-distance providers)⁴ than companies that do not obtain/use NANPA –issued numbers. In the PSTN, the local providers are responsible for routing 911 calls, for example, and in most cases, users who have presubscribed long distance providers ONLY receive the calls that are dialed with a 1+ prefix (depending on the PIC arrangement there are inter-lata PICs and intra-LATA PICs), and do not have to worry about 911 compliance issues. Similarly, nexVortex users are using the service to originate “long distance” calls over the internet, not offering the customers an alternative for their “local” telephone service, and currently, nexVortex does not obtain or assign NANPA telephone numbers to its end users.

(A) 911 Issues

Because nexVortex service uses an ip client, the nexVortex end-user has the ability to easily move their service location from place to place. The only stipulation is that the ip client be connected to the internet via a broadband. While providing great freedom and flexibility to the end user, this makes it technically impossible to determine where the user is physically located at any given instance. Even if nexVortex allowed the end user to dial 911 (it is currently blocked, along with 900 and other pay per call services), nexVortex does not have the ability to know where the nexVortex user originated the call from in real time. Also, given the fact that nexVortex does not currently use NANPA numbers to identify the nexVortex end user (instead it uses a SIP

⁴ See, NPRM at para. 37.

convention like name@nexvortex.com in the SIP call stream), there is no way for a 911 agency to call back the end user, nor track the call to a specific physical location. When the nexVortex customer places the “call” and it is ultimately delivered to the terminating gateway for connection to the PSTN, the SIP From field contains the firstname@nexvortex.com of the user. When the gateway provider converts the call from SIP to TDM to terminate the call, the gateway provider may insert their local number into the caller-ID field. For example, if joex@nexvortex.com places a SIP call to their sister in Baltimore, MD, and joex is in Herndon, Virginia, the call routes through the public internet (after nexVortex validates the call) to the terminating gateway provider. In this call example, the call is routed to a gateway provider in Maryland and the call then exits into the PSTN via that gateway providers arrangement to terminate calls (either with a CLEC, LEC or an LD provider as it makes no difference to nexVortex since we do not control the termination method) but the call is “populated” with an NPA NXX XXX convention that displays a 301 NXX XXX to the called party. This happens because there is no “NANPA” number associated with joex@nexvortex.com and if the terminating gateway did not put in its own NANPA numbers, the call may not be accepted by the called party if they did not accept calls with “private” or “unavailable.” Thus, in this case, if the call went out of the nexVortex terminating gateway providers network with the 301 NXX XXXX (but they are blocked now), and reached a 911 PSAP in Maryland, they would only be able to track the 911 call back to the 301 NXX XXXX owners location (i.e., the gateway provider) and not to the nexVortex user in Virginia. In short, there is no way in the current number convention (i.e., not using a NANPA-issued

telephone number, which would allow calls back to the end user) for nexVortex to handle 911 calls.

(B) Exclusive Federal Jurisdiction on IP-Enabled Services

The FCC requests comment on whether it should extend findings in the Pulver Declaratory Ruling to other IP-enabled services, specifically if it should exert total federal jurisdiction over other IP-enabled services.⁵ If the FCC determines it will apply regulations to the IP-enabled services, nexVortex believes that the FCC should exert exclusive federal jurisdiction over the IP-enabled services. It is difficult for companies to have to comply with potentially 50 different sets of regulations applying to its services, especially in light of the nature of the internet. If nexVortex was required to comply with this level of state and federal regulation, then it is likely that it will not survive long as an entrepreneurial concern before it even has the chance to offer service to the public on a paid basis! Given the method of originating calls via the internet and the portability of the computers nexVortex users utilize to make the “long-distance” SIP calls terminating to the PSTN, attempting to determine the originating location of a call in order to determine the regulatory treatment (i.e., is this an intrastate SIP call originating from a computer client from a Starbucks coffee shop in Texas, calling to Texas, or calling to Washington, DC) is impossible. Thus, it would be incumbent on the FCC to exert jurisdiction over IP-enabled services that are unable to determine the jurisdiction of a call. Another example to support this: A nexVortex user signs up/registers for service in Virginia (billing address). He takes his computer to the UK on a trip, makes a SIP based call from the UK to Virginia. This is clearly not an intrastate call. Further, there is no way for nexVortex to determine that the user is in the UK, or in Virginia for that matter

⁵ See, NPRM at para.40, 41.

in order to determine the jurisdiction of the call. When nexVortex begins charging end users for calls, it will charge based on where the call (domestic US, international) terminates, not originates.

(C) IP/VoIP-Equal Access

The FCC, in its NPRM also asks for input on any other issues that it should consider as it determines the level, if any, of regulation it will impose on providers of IP-enabled services. nexVortex, as discussed above, likens itself to a long-distance provider in the PSTN environment. nexVortex is completely dependant upon the nexVortex's end users broadband provider (cable, DSL) for transporting the SIP stream to the nexVortex server for ultimate call treatment and termination to the terminating gateway providers' location.

As the FCC is aware, currently broadband providers, like COX do not allow its high speed internet users to use another internet provider (like AOL, or MSN) as their portal provider. In short, a COX high speed internet user is stuck with COX as their portal provider. Only Comcast (to nexVortex's knowledge) currently allows its high-speed users to elect someone else other than Comcast as the portal provider, effectively breaking the service into a transport function. Comcast only has this arrangement with a few providers, and is a negotiated arrangement.

nexVortex raises this issue in order to transition to the real concern regarding equal access. The underlying broadband providers, such as COX, Comcast, Verizon, Covad or any others, have the ability to monitor and control what information flows from the end user's computer by monitoring, opening or closing specific computer ports that are used by companies like nexVortex to traverse in order to move from the end user

computer to the nexVortex server. nexVortex, at a recent COMPTTEL conference in February 2004, in California asked a panel of VoIP executives if they were concerned that broadband providers might “block” their services in lieu of their own broadband VoIP originated services. The panelists responded that they thought business pressures, or market pressure would prevent this from happening. nexVortex strongly disagrees and believes that given the current “bottleneck” control that broadband providers exhibit by not allowing a non-broadband portal provider to be the users portal provider will also become the next big issue for “long-distance” VoIP providers like nexVortex. Specifically, providers like COX and Time Warner who have rolled out cable-based telephony solutions obviously want their customers to use their services for local dial tone solutions and long distance calling. These providers have the ability, and if not required by the FCC to do so, to block the ports that alternative VoIP providers use to complete their “calls” from an end user computer over the underlying broadband providers network or “interfere” with the quality of connections to the point that providing service across the access provider’s infrastructure will become impractical.

nexVortex requests, regardless of any other final determinations it makes in the IP-enabled rules, to develop and apply the same local and toll dialing parity that local exchange carriers are required to comply with in 47 C.F.R., Subpart C-Obligations of All Local Exchange Carriers, Section 51.207 and 51.209. The FCC should require that broadband providers allow VoIP providers such as nexVortex to be accessed by a broadband end user in order to complete calls. In short, broadband providers must be required to offer EQUAL and UNFETTERED access to other IP-enabled companies capable of originating and terminating VoIP calls and other enhanced services from the

broadband providers' end user. With out a federal mandate, nexVortex is concerned that broadband providers have every incentive to block or impair access to nexVortex (or other companies like Vonage, or ITXC, or DeltaThree) end users in lieu of their own broadband telephony services.

(D) USF AND ACCESS CHARGES

nexVortex does not believe the FCC should impose USF contributions on IP-enabled providers like nexVortex. nexVortex pays (resells) terminating carriers for completion of its public internet originated calls. Those providers already, in most cases are either LD providers or CLECs, pay into the USF fund. There is no reason to require a VoIP provider to fund the USF. The same hold true with access charges. As the nexVortex calls are originated via broadband and travel the public internet until they terminate at a gateway provider soft switch, access charges are paid on the terminating end by the gateway provider. There is no reason to require a VoIP provider to be assessed access charges when it is already compensating a terminating gateway provider when calls are handed off to the PSTN.

III. CONCLUSION

nexVortex believes that the FCC should consider minimal regulations on IP-enabled services that utilize the public internet for origination of services. To that extent, it recommends that the FCC implement IP/VoIP equal access obligations on broadband providers in order to prevent broadband providers from blocking competitive providers services, like nexVortex. nexVortex also urges the FCC to avoid imposing 911 obligations on providers who do not utilize a NANPA-issued telephone number and are not offering a “first or second line” telephony solution to end users. To the extent that the FCC decides to impose regulations on IP-enabled providers, it should look at the functional differences between IP services that rely on NANPA numbering and those that do not. nexVortex also opposes the FCC imposing USF or access charge obligations on companies like it who terminate calls to providers that already have USF and access charge obligations. Finally, nexVortex supports the FCC exercising exclusive federal jurisdiction over IP-enabled services like the one that nexVortex offers as it’s impossible for nexVortex to determine the jurisdiction of any SIP-based (public internet) originated call that it handles.

Respectfully submitted,

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May 28th, 2004